

Work Order ID **86433*****86433***

Page 1

June-28-12 1:03:03 PM

Item ID: D2916-3

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Cable Guard, 212 Skitube

Start Date: 28/06/2012 Start Qty: 4.00

4

Cust Item ID:

Required Date: 12/07/2012 Req'd Qty: 4.00

4

Customer:

Reference:

2.5

Approvals: Process Plan: MLJDate: 12/06/28 Tooling:

Date:

Run Start

NR1

QC:

Date: 12/06/28 SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2916	Rev D								
100		0.00							FB12-7-8
100	FLOW WATER JET								Jm 12-12-19
Waterjet	Memo	0.00							Pto
FLOW CNC Waterjet	1-Cut as per Dwg D2916 Dwg Rev: <u>D</u> Prog Rev: <u>D</u> 2- Deburr if necessary								
UHmw 1" Blk 44.94" x 1.75" +/- 0.030"									
110	QC2- Inspect parts off machine FAI/FAIB	0.00							Jm 12-12-19
110									
QC	Memo	0.00							
Quality Control									
120		0.00							
120	HAAS CNC VERTICAL MACHINING #1								
HAAS 1	Memo	0.00							
HAAS CNC vertical machine #1	BATCH: <u>86433</u> 1- Mill as per Folio FB077 Rev: <u>AA</u> & Dwg D2916 Rev: <u>D</u> 2-Deburr per dwg D2916								

W/O: 410433

WORK ORDER CHANGES

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D2916-3 PAR #: _____ Fault Category: Waterjet NCR: Yes No DQA: Just Date: 12/01/14
 Resolution: _____ Disposition: Scrap QA: N/C Closed: CK Date: 11

WORK ORDER NON-CONFORMANCE (NCR)

DATE		Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
12 12-12-14	100	blanks from waterjet too short. length supposed to be 44.94". Lengths vary between 44.75 to 44.8125 6 pieces	Q38012 12/12/15	scrap + replace x4 <u>B123949</u>	JM 12-12-19		Q38012 12/12/15	12/12/15
		R.I. Blank Program was too short 		110.96 x4 <u>443.84</u>				

NOTE: Date & initial all entries

Work Order ID 86433

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Page 2

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Item Name: Cable Guard, 212 Skitube

Start Date: 28/06/2012 Start Qty: 4.00

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Cust Item ID:

Required Date: 12/07/2012 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* QC Quality Control	QC2- Inspect parts off machine FAI/FAIB Memo	0.00 0.00	CPE/B... 2012-12-21			4	0		
140 *140* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00	13-01-03			4	0		
150 *150* Packaging Packaging	Identify as per dwg & Stock Location: <i>87 204.</i> Memo	0.00 0.00				4		87	13-01-03

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Page 3

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Setup Start ***NS1***

Revision ID:

Stop ***NS2***

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Start Date: 28/06/2012 Start Qty: 4.00

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Required Date: 12/07/2012 Req'd Qty: 4.00

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160

QC21- Final Inspection - Work Order Release

0.00

160

QC

Memo

0.00

Quality Control

13/1/9

13-01-4

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Picklist Print

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Page 1

Work Order ID: 86433

86433

Parent Item: D2916-3

D2916-3

Parent Item Name: Cable Guard, 212 Skitube

Start Date: 28/06/2012

Required Date: 12/07/2012

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:A New Issue 06-06-19 JLM
IPP Rev:B Now water jet 06-07-14 EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MUHMWB10		Purchased	No			100	sf	72.0100	0.55	2.315789			

MUHMWB10
UHMW 1" Black

**

18 12-7-6

Location	Loc Qty	Loc Code
MAT018	48.9	
120972	1	
121346	27.1	
121954	20.8	
MAT019	1.5	
118814	1.5	
ST052	21.60999474	
121277	12.8	
121278	8.80999474	

22786

W/O:		WORK ORDER CHANGES					
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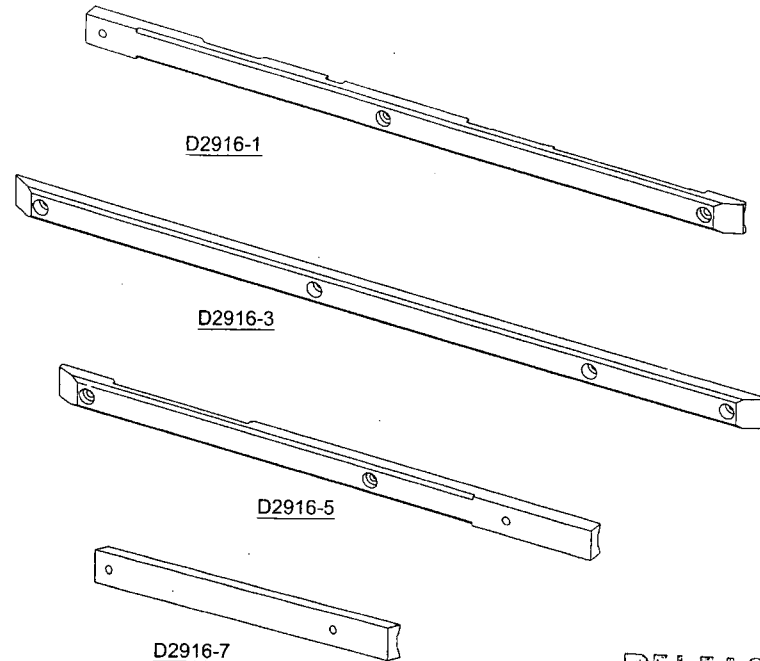
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SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 86433 MLJ

12/06/28

NOTES:

- 1) MATERIAL: UHMW BLACK TIVAR 1000 VIRGIN MATERIAL
REF DART SPEC MUHMB10
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL UNMARKED RADII 0.020 TO 0.040
- 6) IDENTIFICATION: ENGRAVE P/N ON LOWER SIDE TO MAX DEPTH OF 0.010 AND MIN RADIUS OF 0.010
- 7) WEIGHT:
 - D2916-1 = 1.37 lbs
 - D2916-3 = 2.33 lbs
 - D2916-5 = 1.19 lbs
 - D2916-7 = 0.96 lbs
- 8) ENGRAVE TWO DART LOGOS (OPPOSITE AS SHOWN) ON UPPER SIDE TO MAX DEPTH OF 0.015 AND MIN RADIUS OF 0.250
- 9) MACHINE CONSTANT SECTION A-A
- 10) MACHINE CONSTANT SECTION B-B
- 11) MACHINE CONSTANT SECTION C-C
- 12) MACHINE CONSTANT SECTION F-F
- 13) MACHINE CONSTANT SECTION G-G
- 14) 25° ANGLE OF TRANSITION BETWEEN SECTIONS WITH MIN RADIUS OF 0.50
- 15) 50° ANGLE OF TRANSITION BETWEEN SECTIONS WITH MIN RADIUS OF 0.50
- 16) MACHINE SLOT WITH 0.063 RADIUS OF TRANSITION BETWEEN SECTIONS
- 17) ALL HOLES DRILLED ON CENTERLINES



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2011-11-02
WJP

D	REVISE MACHINE SLOT. (ZN C5-2, C4-4, C4-5, C6-5) REVISE SECTIONS D-D, L-L, N-N	RF	11.10.07
C	REVISE D-D; ADD L-L, M-M & N-N; FOR D4406-041/-043 COMPATIBILITY	RF	11.08.17
B	ADD K-K FOR D2521 COMPATIBILITY	CP	00.02.24
A	NEW ISSUE	CP	99.09.29
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. D
MFG. APPR.	<i>[Signature]</i>	D2916	SHEET 1 OF 6
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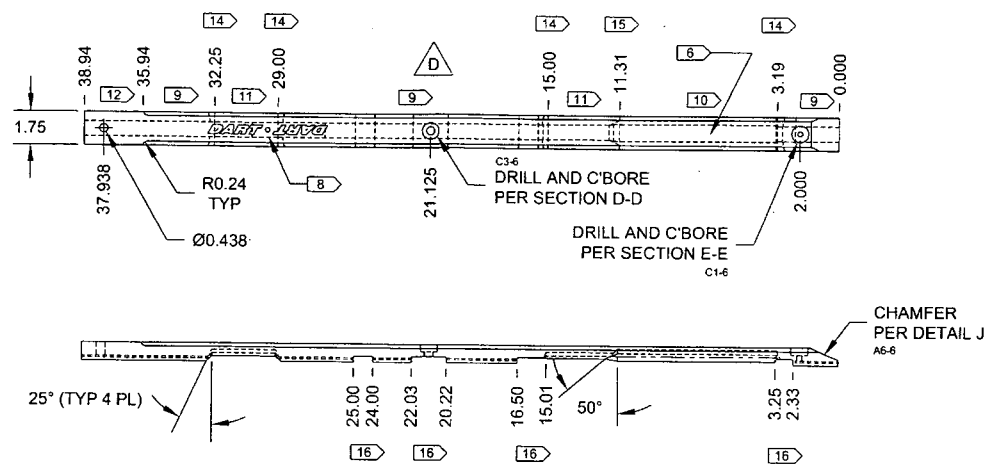
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D2916-1

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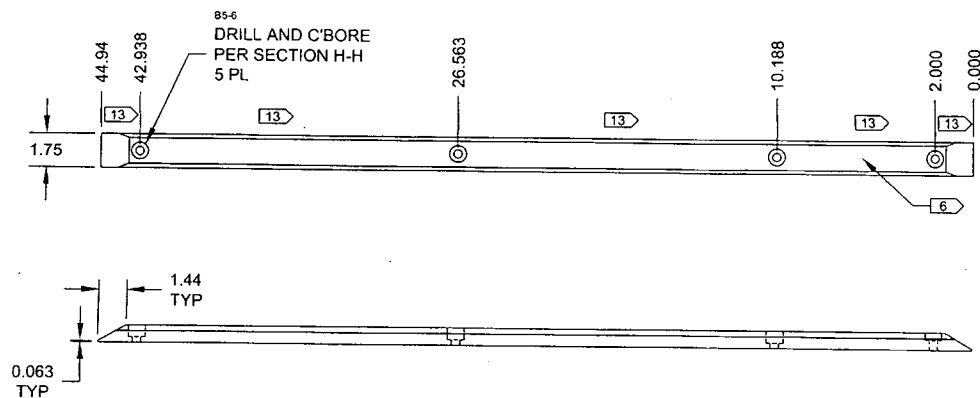
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D2916-3

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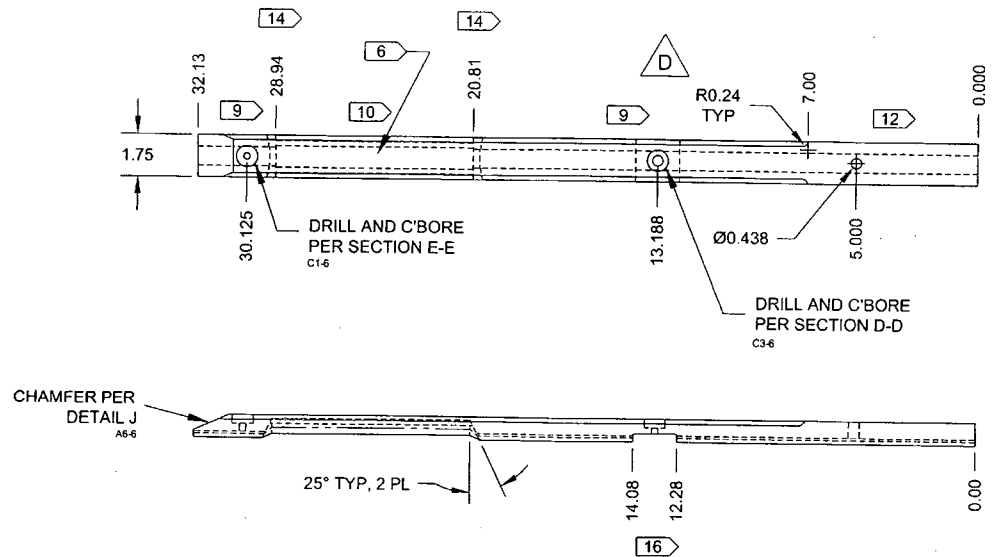
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D2916-5

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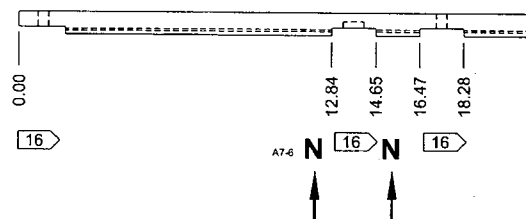
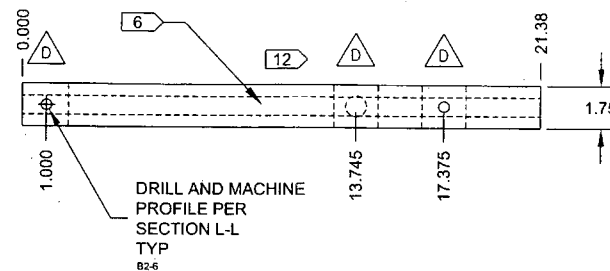
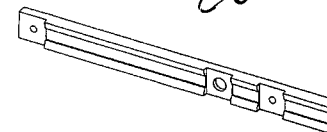
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D2916-7

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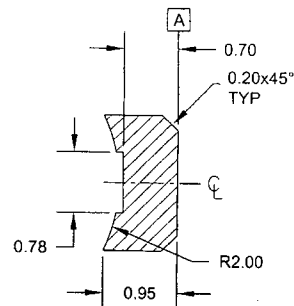
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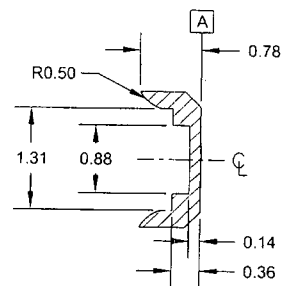
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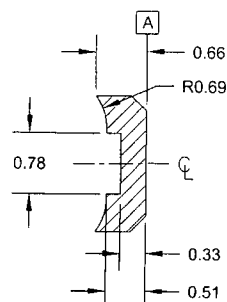
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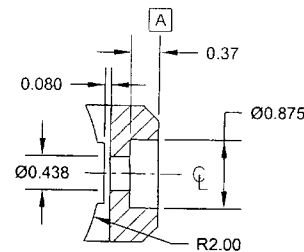
SECTION A-A
SCALE 4X
C3-2
C4-2
C5-4



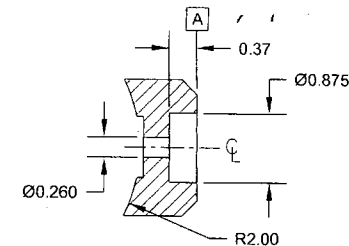
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SCALE 4X
C3-2
C5-4



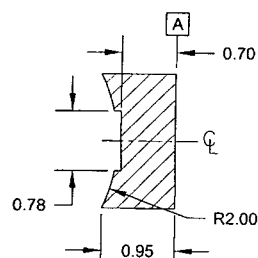
SECTION C-C
SCALE 4X
C5-2
C4-2



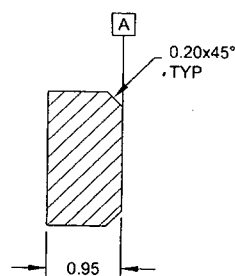
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SCALE 4X
C4-2
C3-4



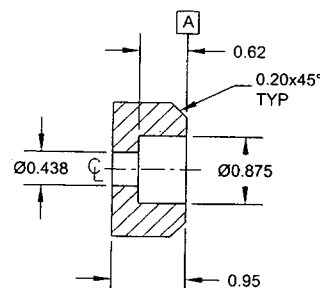
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C3-2
C5-4



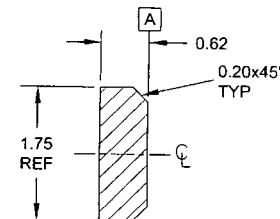
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C5-2
C3-4
C5-5



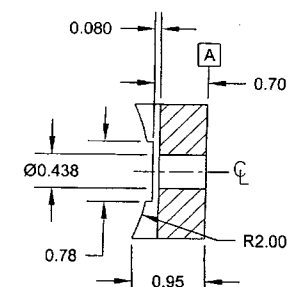
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C3-3
C4-3
C5-3
C6-3
C7-3



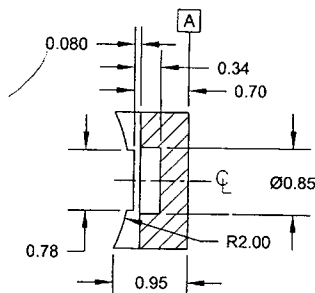
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C6-3



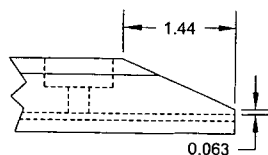
SECTION K-K
SCALE 4X
B3-2
B4-2
B5-2



SECTION L-L
SCALE 4X
C5-5



SECTION N-N
SCALE 4X
B6-5



DETAIL J
SCALE 4X
B3-2
B7-4

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2011-11-02

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